

A NEW HELIODINID FROM ILLINOIS

(LEPIDOPTERA, HELIODINIDAE)

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The species herein described was submitted by Mr. C. Wester, a student at the University of Illinois, Urbana, who is studying the insects attached to the four-o'clock, *Mirabilis nyctaginea* (Michx.) MacM. Since a name is required for inclusion in a paper on his studies it is supplied below.

The similarity between this species and *H. nyctaginella* Gibson and the identical food plant are unusual.

The outline drawings were made by the author.

Heliodines ionis, new species

Figs. 2-2b

Alar expanse, 9-12 mm.

Labial palpus cream colored with brassy sheen; apex of third segment black. Antenna and collar black, the former with purplish iridescence. Head and thorax metallic brassy-green. Forewing shining ochraceous-orange; basal fourth of costa broadly black; costa with six leaden metallic spots of raised scales with pale violaceous iridescence; spots more or less narrowly edged with black; on dorsum three similar spots; narrow black edging from subapical costal spot, around apex and termen, to tornus; cilia very dark gray. Hind wing black; cilia gray. Legs mostly metallic brassy-green, but tibiae and tarsi with shining black bands. Abdomen brassy in male, shining black in female.

Male genitalia.—As figured.

Female genitalia.—Bursa copulatrix and bursa seminalis as figured. Ductus bursae threadlike; ostium membranous.

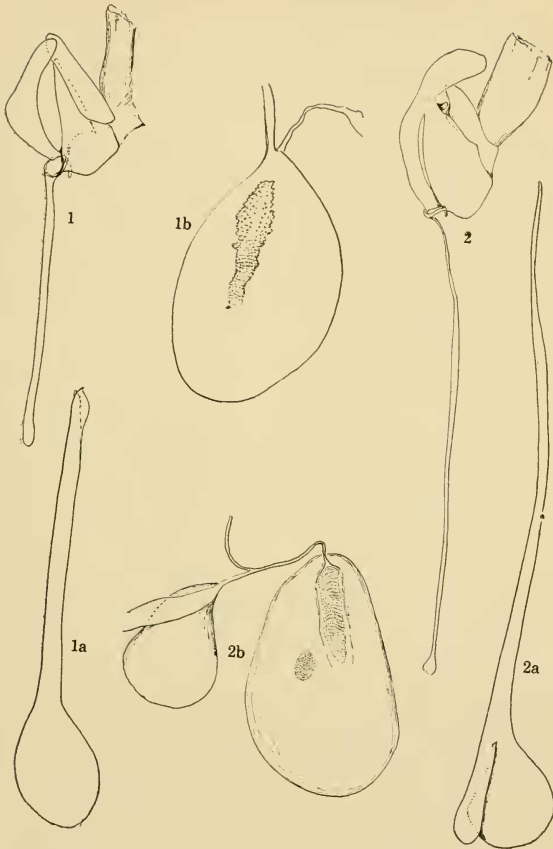
Type.—U. S. N. M. no. 61496.

Type locality.—Champaign, Illinois (5. vii. 51).

Food plant.—*Mirabilis nyctaginea* (Michx.) MacM.

Remarks.—This species and *nyctaginella* are so similar superficially that they are easily confused and may be separated only by the absence of the narrow black basal portion of the forewing in *ionis*. The genitalia, however, present abundant differences. A comparison of the outline figures of the genitalia will suffice to distinguish the two. For completeness and easy comparison I have added figures of *nyctaginella* (figs. 1-1b).

Described from the male type and 24 male and female paratypes, all from the same locality. Paratypes in the U. S. National Museum and in Mr. Wester's collection. Dates on the specimens range from July 5 to November 25, 1951.



Figs. 1-1b, *Heliodines nyctaginella* Gibson. 1, lateral view of male genitalia with aedeagus removed; 1a, lateral aspect of aedeagus; 1b, bursa copulatrix to show signum; figs. 2-2b, *Heliodines ionis*, new species. 2, lateral view of male genitalia with aedeagus removed; 2a, lateral aspect of aedeagus; 2b, bursa copulatrix, with two signa, and bursa seminalis.